# COMPUTER DIRECTED HEAD STACK ASSEMBLY INSTALLATION SYSTEM

## Abstract of the Disclosure

The present invention provides a computer directed head stack assembly installation system with an installation software stored on recordable media directing the controlling a sequence of head stack installation assembly steps executed by a robotic assembly to pick and place a head stack assembly into a basedeck. The installation software program monitors compliance of the placement operation regarding mechanical resistance encountered by the head stack assembly engaging the basedeck compared to a dynamic force threshold F determined by the equation $[F = (f(p) +/- x)]$ and against the dynamic slope V determined by the equation $[V = V = (f_n - f_{n-1})/(p_n - p_{n-1})$. Upon successful installation of the head stack assembly into the basedeck forming the head disc assembly, the head disc assembly is released from the head stack assembly installation station.

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